

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2003/001891

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G09B 23/28

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: A61B, G09B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 9939317 A1 (HT MEDICAL SYSTEMS, INC.), 5 August 1999 (05.08.1999), page 11, line 1 - line 17; page 29, line 7 - page 37, line 6, figures 15-17	1,2,3,16,23
A	---	24
A	EP 0970714 A2 (MITSUBISHI DENKI KABUSHIKI KAISHA), 12 January 2000 (12.01.2000), page 7, line 10 - page 9, line 20	1,2,3,16,23, 24
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☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "B" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

8 April 2004

Date of mailing of the international search report

15-04-2004

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## INTERNATIONAL SEARCH REPORT

Information on patent family members

27/02/2004

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WO	9939317	A1	05/08/1999	AU	2242099	A	16/08/1999
				EP	1103041	A	30/05/2001
				GB	0021185	D	00/00/0000
				GB	0302744	D	00/00/0000
				GB	2349730	A,B	08/11/2000
				GB	2384613	A,B	30/07/2003
				JP	2003525639	T	02/09/2003
				US	2001016804	A	23/08/2001
				US	2001026551	A	04/10/2001
				AU	4718499	A	17/01/2000
				EP	1123172	A	16/08/2001
				EP	1369194	A	10/12/2003
				US	6053675	A	25/04/2000
				WO	0000314	A	06/01/2000
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EP	0970714	A2	12/01/2000	JP	2000042117	A	15/02/2000
				US	6375471	B	23/04/2002
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**Box No. II** Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III** Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

**see extra sheet**

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: **1, 2, 3, 16, 23, 24**

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

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## Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

The present application has been considered to contain 9 inventions which are not linked such that they form a single general inventive concept, as required by Rule 13 PCT for the following reasons:

Claims 1 and 23:

The closest prior art has been identified as:

D1: WO 9939317 A1

Document D1 discloses a device for a simulation system for simulating medical procedures (i.e. interventional operations). In D1 it is possible to insert nested mock or actual instrument into the device and simulate movements and rotation for every instrument, (see page 11 line 1- 17). From D1, see page 29 line 7 - page 37 line 6 and figures 15-17, it is known that the device contains movable carriages corresponding to the number of mock or actual instruments, that the carriages can move on tracks, one or several interconnecting members which interconnects the carriages serially, every carriage has an opening for enabling reception of an instrument, each carriage comprising members for receiving and locking one instrument, and members for receiving a movement from said instrument with respect to a simulation characteristic.

The invention according to the independent claims 1 and 23 lacks novelty since all the technical features described in these claims are known from D1.

Claims 2-22:

The following separate inventions were identified for the dependent claims 1-22:

INV1: Claims 2, 3, 16 relates to the interconnecting member.

INV2: Claims 4, 12-14, 15 are directed to a detecting arrangement for detecting the type of instrument.

INV3: Claims 5, 7, 17, 18 are directed to a control unit and a processing unit for measuring and controlling the instruments position and movement.

INV4: Claims 6, 8 relates to transmission and tracks for the carriages.

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INV5: ~~Claims 9-11, 20-22 are directed to mechanical details on the carriages.~~

INV6: Claim 19 relates to a simulated end part on the real instrument.

A search for a special technical feature among claims 2-22 of the present application did not reveal a unifying, novel technical feature that define a contribution over the prior art. Consequently it appears that, a posteriori, claims 2-22 includes 6 different inventions, and INV2-INV6 do not satisfy the requirements of unity of invention and will therefore not be taken under consideration in this report.

The further investigation will therefore be based on INV1 (claims 2,3,16).

From D1 it is known that the opening is provided with an interconnecting member, that the interconnecting member could be telescopic, and that each carriage is connected to an interconnecting member.

The invention according to the independent claims 2, 3 and 16 lacks novelty since all the technical features described in these claims are known from D1.

Claims 24-34:

Claims 24-34 are treated as belonging to claim 2.

The following separate inventions were identified for the dependent claims 24-34:

INV7: Claim 24 relates to a control system comprising a first and a second controller for controlling the speed of a first and a second displaceable member.

INV8: Claims 25-27 are directed to identification means for detecting and identifying an instrument.

INV9: Claims 28-34 relates to an arrangement for measuring, generating and controlling forces and resistances to or from a simulated instrument.

A search for a special technical feature among claims 24-34 of the present application did not reveal a unifying, novel technical feature that define a contribution over the prior art. Consequently it appears that, a posteriori, that claims 24-34 includes 3 different inventions, and INV8-INV9 do not

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satisfy the requirements of unity of invention and will therefore not be taken under consideration in this report.

A partial search has been carried out, which relates to INV1 and INV7 (including claims 1, 2, 3, 16, 23 and 24) mentioned above.

The applicant is invited to pay additional fees for INV2-INV6 and INV8-INV9.